

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number  
**WO 2005/059122 A1**

(51) International Patent Classification<sup>7</sup>: C12N 7/00, (74) Agent: GRUBB, Philip; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).  
A61K 39/125

(21) International Application Number:  
PCT/EP2004/014117

(22) International Filing Date:  
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/529,349 12 December 2003 (12.12.2003) US

(71) Applicant (for all designated States except AT, US): NOVARTIS AG [CH/CH]; Lichstrasse 35, CH-4056 Basel (CH).

(71) Applicant (for AT only): NOVARTIS PHARMA GMBH [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ANDERSON, Gary, A. [US/US]; 15192 W. 311th Street, Paolo, KS 66071 (US). KEIL, Daniel, J. [US/US]; 30837 West 231st Street, Spring Hill, KS 66083 (US). FLAKUS, Robert, J. [US/US]; 4605 East 26th Street, #302, Sioux Falls, SD 57110 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/059122 A1

(54) Title: PATHOGENIC BOVINE ENTEROVIRUS, VACCINES, AND DIAGNOSTIC METHODS

(57) Abstract: The isolation of a novel pathogenic bovine enterovirus is described. The novel pathogenic bovine enterovirus is used to develop antibodies and immunogenic compositions against the novel pathogenic bovine enterovirus. Diagnostic assays are described.